Comments to those Filed by PPL Telcom, LLC with the FCC Regarding E. T. Docket No. 03—104

Paragraph II, Last Sentence: "Based upon the outcome of the trials presently underway, PPL Telcom intends to make a decision on launching commercial BPL service prior to the end of 2003."

Based on tests that are available on the ARRL web site http://www.arrl.org, I do not feel the proposed commercial introduction of the BPL technology gives FCC adequate time to sufficiently scope the level of potential radiated and conducted interference the BPL technology may/may not cause. No other interference potential studies are available online for assessment. Interference potential of a radiated RF emission is traditionally measured in field strength, or volts/meter, equivalently, dBuv/m. This is a world-wide accepted measurement standard and technique. The true interference potential of the BPL technology, when widely commercially deployed, does not lend itself to these measurement techniques. FCC assessment of the interference potential of the BPL technology should be accomplished using the FCC proposed "interference temperature" which is applicable to measurement of both the traditional interference-causing sources AND the potential interference of the BPL technology. To commercially deploy the BPL technology by the end of 2003 does not give the FCC and other concerned parties (military, maritime, aviation, commercial short-wave broadcasters, television broadcasters and other licensed services) adequate time to amend the standards and properly assess the interference potential of the BPL technology.

2) Paragraph III: First Sentence: "BPL has the potential to provide broadband service in areas where there is presently little, or no, broadband service available."

In several of the write-ups on the BPL technology and information available online, the BPL technology requires a "repeater" or booster spaced roughly every mile along any given power line. I will cite myself as an example of why this assumption and thinking is economically flawed. I live roughly 30 miles from any area where broadband access is available. The area between the broadband access region and our home lies in a lightly populated area of Colorado. There is roughly one dwelling for every 100 or so acres on the average. I seriously question the economic reasoning of any BPL provider spending the money for 30 "repeaters", one per mile, to bring broadband access to such a sparsely populated area. Yes, it has the potential, but in the reality of economics, the cited quote does not hold up.

Paragraph 5: "For the reasons set forth below, PPL Telcom believes that BPL does not pose significant risks for unintended high frequency radiations that will impair the operation of the consumer devices, amateur radio communications, or other forms of commercial communications…"

Generally, the remaining contents of the paragraph deal with FCC Part 15 certification of the individual components of the BPL system. If PPL Telcom "believes" that BPL does not pose significant risks for……, where is their data, how was it obtained, what are its quantitative implications to licensed services that share the 2 MHz to 80 MHz spectrum, and what IS the interference potential of an operating system deployed over the power lines? Use and certification of the individual components does not insure the OPERATING SYSTEM – the collection of the parts connected in an OPERATIONAL manner – will/will not cause interference when connected to the transmission medium:

the power lines. Physics dictates it WILL radiate. Have the tests that resulted in the FCC Part 15 certification of the components involved AN OPERATING SYSTEM AS DEPLOYED OVER POWER LINES? If not, give the FCC time to properly assess the interference potential of the SYSTEM before commercially deploying an interference potential unproven technology. That's part of their job: to assure Part 15 operating systems do not unnecessarily interfere with legitimately licensed services that share the unlicensed Part 15 frequencies.

In addition, the last bullet of paragraph (3): "SAFETY is a key element of the BPL installation and operation."

What does safety have to do with FCC and the potential of interference to licensed services that share the unlicensed Part 15 frequencies? It sounds good, but has no relevance to the task of FCC in assessing the interference potential of Part 15 devices.